

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

CISCO SYSTEMS, INC.,
Plaintiff/Counter-Defendant,
v.
UNILOC USA, INC., et al.,
Defendants/Counter-
Claimants.

Case No. [18-cv-04991-SI](#)

**ORDER GRANTING
PLAINTIFF/COUNTER-
DEFENDANT'S MOTION FOR
JUDGMENT ON THE PLEADINGS**

Re: Dkt. No. 43

Now before the Court is plaintiff/counter-defendant's motion for judgment on the pleadings, which seeks a finding that U.S. Patent No. 6,980,522 is patent-ineligible under 35 U.S.C. § 101. Dkt. No. 43. This matter came on for hearing on May 3, 2019.

BACKGROUND

On August 15, 2018, plaintiff/counter-defendant Cisco Systems, Inc. ("Cisco") filed this action against Uniloc USA, Inc., Uniloc 2017 LLC, and Uniloc Licensing USA LLC (collectively, "Uniloc" or "defendants/counter-claimants") seeking a declaration of non-infringement of U.S. Patent No. 6,980,522 ("the '522 patent"). Dkt. No. 1. On October 12, 2018, Cisco filed an amended complaint. Dkt. No. 16 ("FAC"). On October 26, 2018, Uniloc answered and counterclaimed against Cisco for infringement of at least claim 6 of the '522 patent. Dkt. No. 19. In January 2019, upon Uniloc's unopposed motion and with the Court's approval, Uniloc filed an answer and supplemental counterclaim, removing Uniloc Licensing USA LLC as a counter-claimant. Dkt. Nos. 27, 28, 29, 30 ("Suppl. Countercl.").

The '522 patent, titled "Ad Hoc Radio Communication System," contains the following

abstract:

In an ad-hoc radio communication system comprising a plurality of stations formed into at least one network, each station is assigned a rank representative of its suitability for performing the role of master station in a network. The rank may for example be assessed depending on the performance of the station's antenna or its access to mains power. It is arranged that the station having the highest rank in a network performs the role of master for that network, thereby improving the efficiency of communication in the network.

FAC, Ex. A ("Patent") at cover page.¹ The patent "relates to a radio communication system comprising a plurality of stations capable of forming an ad-hoc network" as typified in a Bluetooth system. *Id.* at 1:4-8. "Such a network is intended to provide low-cost, short range radio links between mobile PC's, mobile phones and other devices, whether portable or not." *Id.* at 1:14-17. "Stations form ad-hoc networks which are known as piconets, each comprising a master station and up to seven slave stations. All stations are identical and capable of acting as master or slave as required. A station can take part in more than one piconet, thereby linking piconets and enabling communication over an extended range." *Id.* at 1:19-25.

According to the specification, a problem with the prior art "is that it is possible for a station having an inefficient antenna to operate as the master." *Id.* at 2:63-66. This can happen for a "wide range of reasons[.]" including inherently poor efficiency of the antenna, the antenna's radiation pattern, "antenna mismatch" that may be caused by the station's local environment, shadowing of the antenna by the host device or a user's body, and "polarization coupling loss, if the polarization of antenna in the master is not aligned with that in one or more of the slaves." *Id.* at 2:66-3:10. The patent proposes to solve this problem "by ranking each station in terms of its antenna performance. A station having the best antenna ranking then preferentially becomes the master. The antenna ranking can be determined under static conditions, or it may be adjusted dynamically depending on the local environment of a station" *Id.* at 3:11-18. Ranking of stations may be based on other criteria beyond antenna performance: "other facts might usefully be taken into account in the ranking, either instead of or in addition to the antenna performance[.]" such as access to mains

¹ Unless otherwise noted, the Court omits references to the accompanying drawings in the specification.

electricity versus battery power. *Id.* at 4:35-44.

Figure 3 of the patent “is a flow chart illustrating a method in accordance with the present invention for a new station joining an ad-hoc wireless network.” *Id.* at 2:11-13.

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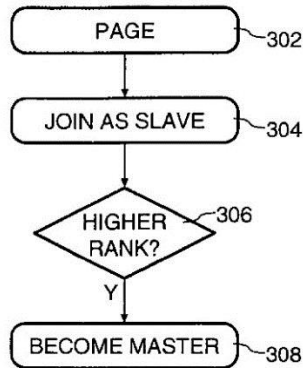


FIG. 3

Claim 6 of the '522 patent reads as follows:

A method of operating an ad-hoc radio communication system having a plurality of stations formed into at least one network, the method comprising the step of:

determining a master/slave rank of each station in the network representative of the station's suitability for acting as master in the network using antenna performance characteristics of each station in view of the antenna's local environment; and enabling a station with the highest rank to be master.

Id. at 6:4-13.

In its counter-claim, Uniloc alleges that Cisco infringed at least claim 6 of the '522 patent. Cisco now moves for judgment on the pleadings, arguing that claim 6 of the '522 patent is invalid under 35 U.S.C. § 101. Dkt. No. 43 (“Pl.’s Mot.”). Uniloc opposes, and Cisco has filed a reply brief. Dkt. Nos. 45 (“Defs.’ Opp’n”), 46 (“Pl.’s Reply”).

LEGAL STANDARD

I. Judgment on the Pleadings

Rule 12(c) of the Federal Rules of Civil Procedure permits a party to move to dismiss a suit “[a]fter the pleadings are closed . . . but early enough not to delay trial.” Fed. R. Civ. P. 12(c). A

1 motion for judgment on the pleadings is “functionally identical” to a Rule 12(b)(6) motion to dismiss
2 for failure to state a claim. *Dworkin v. Hustler Magazine, Inc.*, 867 F.2d 1188, 1192 (9th Cir. 1989).
3 The court must accept “all factual allegations in the complaint as true and construe them in the light
4 most favorable to the non-moving party.” *Fleming v. Pickard*, 581 F.3d 922, 925 (9th Cir. 2009)
5 (citing *Turner v. Cook*, 362 F.3d 1219, 1225 (9th Cir. 2004)). “A judgment on the pleadings is
6 properly granted when, taking all the allegations in the pleadings as true, [a] party is entitled to
7 judgment as a matter of law.” *Lyon v. Chase National Bank, USA, N.A.*, 656 F.3d 877, 883 (9th Cir.
8 2011) (quoting *Dunlap v. Credit Protection Ass’n, L.P.*, 419 F.3d 1011, 1012 n.1 (9th Cir. 2005)).

9 Under § 282 of the Patent Act, issued patents are presumed to be valid. 35 U.S.C. § 282.
10 As such, an alleged infringer asserting an invalidity defense pursuant to § 101 bears the burden of
11 proving invalidity by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P’ship*, 564 U.S.
12 91, 95 (2011).

13 14 **II. Subject Matter Eligibility Under § 101**

15 Under Section 101 of Title 35 of the United States Code, the scope of patentable subject
16 matter encompasses “any new and useful process, machine, manufacture, or composition of matter,
17 or any new and useful improvement thereof.” *Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (quoting
18 35 U.S.C. § 101). Section 101 “contains an important implicit exception: Laws of nature, natural
19 phenomena, and abstract ideas are not patentable.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208,
20 216 (2014) (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589
21 (2013)). They are not patent-eligible because “they are the basic tools of scientific and technological
22 work,” which are “free to all men and reserved exclusively to none.” *Mayo Collaborative Servs. v.*
23 *Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012) (citations omitted). The United States Supreme
24 Court has explained that allowing patents for such purported inventions “might tend to impede
25 innovation more than it would tend to promote it[.]” thereby thwarting the primary objective of
26 patent laws. *Id.*

27 *Alice* provides the relevant analytical framework for “distinguishing patents that claim laws
28 of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications

of those concepts.” 573 U.S. at 217. First, the court must determine whether the claims at issue are directed to one of the patent-ineligible concepts. *Id.* Second, if the claims are directed to a patent-ineligible concept, such as an abstract idea, the court must “consider the elements of each claim both individually and as an ordered combination to determine whether the additional elements transform the nature of the claim into a patent-eligible application.” *Id.* (citation and quotation marks omitted). Step two is often described “as a search for an ‘inventive concept[.]’” *Id.* at 217-18. “When viewing claim elements individually, the court must remember that recitation of conventional, routine, or well-understood activity will not save an abstract claim.” *California Inst. of Tech. v. Hughes Commc’ns, Inc.*, 59 F. Supp. 3d 974, 980 (citing *Alice*, 573 U.S. at 223). However, “[w]hen viewing claim elements as an ordered combination, the court should not ignore the presence of any element, even if the element, viewed separately, is abstract.” *Id.* “If the ordered combination of elements constitutes conventional activity, the claim is not patentable, but courts should remember that a series of conventional elements may together form an unconventional, patentable combination.” *Id.*

The Federal Circuit has recently held that “[w]hether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1369 (Fed. Cir. 2018). However, the *Berkheimer* court also clarified that “[n]othing in this decision should be viewed as casting doubt on the propriety of those cases” resolving § 101 inquiries on motions to dismiss or summary judgment, where there is no genuine dispute over the underlying material facts. *Id.* “When there is no genuine issue of material fact regarding whether the claim element or claimed combination is well-understood, routine, conventional to a skilled artisan in the relevant field, this issue can be decided . . . as a matter of law.” *Id.* “To the extent that the Court must resolve underlying questions of fact related to eligibility, they must be proven by clear and convincing evidence.” *Broadband iTV, Inc. v. Oceanic Time Warner Cable, LLC*, 135 F. Supp. 3d 1175, 1188 (D. Haw. 2015), *aff’d sub nom. Broadband iTV, Inc. v. Hawaiian Telcom, Inc.*, 669 F. App’x 555 (Fed. Cir. 2016) (citations omitted).

DISCUSSION

Cisco seeks judgment on the pleadings, arguing that claim 6 of the '522 patent claims patent-ineligible subject matter, namely, that it is directed to an abstract idea that lacks an inventive concept. Uniloc contests Cisco's characterization, arguing the patent "departs from the prior art with a specific technique to improve the functionality of radio communications systems that form ad-hoc networks[.]" that the patent is among those that "solve computer related problems by improving the functionality of computers[.]" and that recent Federal Circuit cases confirm that claim 6 is patent-eligible. Defs.' Opp'n at 1. Whether the patent is directed towards ineligible subject matter and whether there is nonetheless an inventive concept that transforms otherwise unpatentable subject matter are discussed in turn below. First, however, the Court discusses whether judgment on the pleadings is appropriate under the circumstances of this case.

I. Rule 12 Motion

Uniloc argues that Cisco's motion must fail because, at this stage, all of the allegations in Uniloc's counter-claim must be taken as true. *Id.* at 16-17. In particular, Uniloc cites to the portions of its counter-claim that allege that "[a] person of ordinary skill in the art reading the '522 patent and its claims would understand that the patent's disclosure and claims are drawn to solving a specific, technical problem arising from the evolution of ad-hoc radio communication systems[.] . . . would understand that the claimed subject matter of the '522 patent presents advancements in the operation efficiency of ad-doc [sic] wireless networks[, and] . . . would understand that claim 6 of the '522 patent contains the inventive concept of operating an ad-hoc radio communication system by determining a master/slave rank of each station in the network representative of the station's suitability for acting as master in the network using antenna performance characteristics of each station in view of the antenna's local environment and enabling a station with the highest rank to be master." *See* Suppl. Countercl. ¶¶ 13-14. As support for these statements, the counter-claim cites back to the patent specification.

Although it is correct that the Court must take the allegations in a well-pleaded complaint as true at this stage, the Court is not required to accept as true "allegations that are merely conclusory,

unwarranted deductions of fact, or unreasonable inferences.” *In re Gilead Scis. Sec. Litig.*, 536 F.3d 1049, 1055 (9th Cir. 2008). Here, the allegations of Uniloc’s counter-claim that are relevant to the Court’s determination of patent eligibility under § 101 are conclusory statements couched as factual allegations. *See Uniloc USA Inc. v. LG Elecs. USA Inc.*, No. 18-cv-6738-LHK, 2019 WL 1549968, at *18-19 (N.D. Cal. Apr. 9, 2019) (finding § 101 issues properly addressed in Rule 12 motion to dismiss where “Plaintiffs’ second amended complaint features nothing but conclusions by, for instance, calling the ’049 Patent ‘novel and inventive’”).

Nor does Uniloc argue that the Court must conduct claim construction to determine the validity of the patent-in-suit. Although the Federal Circuit has stated “that it will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter[,]” it has also stated that “claim construction is not an inviolable prerequisite to a validity determination under § 101.” *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012). In any event, looking to the disputed terms and proposed constructions as recently briefed in the parties’ joint claim construction brief, *see* Dkt. No. 44, the Court finds that construction of these terms would not aid or alter the Court’s determination today regarding the subject matter eligibility of the ’522 patent.²

The Court finds that in the circumstances of this case it is appropriate to resolve the question of patent eligibility under § 101 on a Rule 12(c) motion for judgment on the pleadings.

² In their joint claim construction and prehearing statement, the parties identify the following disputed terms and proposed constructions:

Claim Term, Phrase of Clause	Uniloc’s Proposed Construction	Cisco’s Proposed Construction
1. “master in the network”	“a station that enables communications with other stations”	“the one station controlling the transmission of all stations in the network”
2. “antenna performance characteristics”	“a measure of signal quality of an antenna”	“two or more performance characteristics of the antenna”
3. “the antenna’s local environment”	plain meaning	local environment of the station to which the antenna belongs

Dkt. No. 44 at 2.

II. Abstract Idea

At step one of the *Mayo/Alice* test, a court must evaluate the patent claims “[o]n their face” and determine if the claims are directed to one of the three “patent-ineligible concepts”: laws of nature, natural phenomena, or abstract ideas. *Alice*, 573 U.S. at 217, 219. The “‘directed to’ inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (citations omitted). “The line between a patentable ‘process’ and an unpatentable ‘principle’ is not always clear.” *Parker v. Flook*, 437 U.S. 584, 589 (1978). The Supreme Court and the Federal Circuit have thus “found it sufficient [at step one] to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish*, 822 F.3d at 1334.

For the reasons discussed below, the Court finds that claim 6 of the ’522 patent is directed to the abstract idea of ranking stations based on antenna performance characteristics and selecting the station with the highest rank to act as master in a network.

Cisco argues that the asserted claim is directed to an abstract idea and cites to other Federal Circuit and district court cases that it states establish that “claims attempting to capture the organizing of data, *e.g.*, ranking stations according to a criterion, are abstract.” Pl.’s Mot. at 7. Cisco asserts that two cases recently decided by Judge Koh and Judge Tigar of this district “are particularly instructive[.]” *See id.* at 8 (citing *Twilio, Inc. v. Telesign Corp.*, 249 F. Supp. 3d 1123 (N.D. Cal. 2017); *24/7 Customer, Inc. v. LivePerson, Inc.*, No. 15-cv-2897-JST, 2017 WL 2311272 (N.D. Cal. May 25, 2017)).

In *Twilio*, Judge Koh found a claim to be directed to an abstract idea where the patent-in-suit (the “Delivery Receipts Patent”) related to “controlling messaging routing in the telephony messaging field.” 249 F. Supp. 3d at 1126. Because a sender of a telephony message did not control the route the message took to its destination, the sender could not trust that the message would reach its destination. A prior art solution was to use a delivery receipt to indicate the message was received, though the delivery receipts suffered from the same reliability problems as the original

1 messages. *Id.* at 1127. The Delivery Receipts Patent purported “to solve this problem through one
2 primary modification to delivery receipt usage: sending the delivery receipt through a ‘second
3 channel,’ which is different from the one that the original message was sent through.” *Id.* Distilling
4 the case law, Judge Koh explained that

5 courts will generally compare the claims at issue to prior § 101 cases, as well as
6 consult several guideposts, including: (1) whether the claims are directed to an
7 “improvement to computer functionality;” (2) whether the claims are directed to a
8 “new and useful technique;” (3) whether the claims have an analogy to the brick-
and-mortar world; and (4) whether the claims are directed to a mental process or a
process that can be performed with a pen and paper.

9 *Id.* at 1143. Focusing on the brick and mortar analogy, the court found that “claim 1 of the [Delivery
10 Receipts Patent] is directed to “selecting the best message routing option based on separately-
11 transmitted feedback” and that “[s]electing the best option based on separately-received feedback is
12 a fundamental activity that has long been performed by humans.”³ *Id.* at 1144. The court analogized
13 to a person who chooses a restaurant based on diner reviews from a third-party service or a person
14 who decides whether to send a package via FedEx, UPS, or USPS based on online feedback from
15 customers. The court disagreed with the patent-holder’s argument that the claim was directed to an
16 improvement to computer functionality, explaining that nothing about selecting the best message
17 routing option based on separately-transmitted feedback improves the functioning of a computer

18 ³ Claim 1 of the Delivery Receipts Patent read, in full:

19 1. A method for transmitting telephony messages comprising:

20 transmitting a first outgoing telephony message through a first channel using a first
21 routing option selected from a plurality of routing options;

22 receiving a message delivery report through at least a second channel, wherein the
23 second channel is different from the first channel;

24 updating message routing data in response to the message delivery report;

25 selecting a second routing option for at least a second outgoing message, the second
26 routing option selected from the plurality of routing options prioritized by the
27 updated message routing data; and

28 transmitting the second outgoing telephony message through the first channel using
the selected second routing option.

Twilio, 249 F. Supp. 3d. at 1129.

1 itself. *Id.* at 1145. “Rather, at most, it contemplates using a computer as a tool for implementing
2 this idea.” *Id.* Thus, the court found the claim to be directed to an abstract idea and, after also
3 finding the claim invalid under step two of the *Mayo/Alice* test, granted the competitor’s motion to
4 dismiss the claim.

5 Shortly thereafter, Judge Tigar examined a patent related to “a method for routing a call to
6 a customer service representative at a call center based on information about the caller and the
7 available representatives.” *24/7 Customer*, 2017 WL 2311272, at *2. The representative claim
8 recited:

9 A method for routing an incoming call to a customer service representative
10 comprising the steps of:

11 identifying the caller of the incoming call;

12 retrieving a profile on the caller;

13 comparing the caller profile with stored customer service representative profiles to
14 determine which customer service representatives are more qualified to handle the
incoming call;

15 ranking the customer service representatives that can best meet the caller’s needs;

16 routing the incoming call to a selected highest ranked customer service
representative; and

17 automatically updating, at the completion of the call, the caller profile and the
18 selected customer service representative profile with information regarding the
success of the call.

19 *Id.* The court held that the patent was “directed to the abstract idea of routing a call to a customer
20 service agent based on information about the caller.” *Id.* at *3. The court found that, as with the
21 patent in *Twilio*, the patent-in-suit was directed to “a fundamental activity that has long been
22 performed by humans,” and proposed “only a general, abstract solution to problems in the prior
23 art[,]” in which customers decided where to route their own calls. *Id.* at *3-4 (citing *Twilio*, 249 F.
24 Supp. 3d at 1144). The court further explained that the claims “simply recite a generalized solution
25 in broad, functional language – namely, “retrieving,” “comparing,” and “ranking” information about
26 the customer and representative. *Id.* at *4. Thus finding that the claims failed step one of the
27 *Mayo/Alice* test, and after finding they also failed step two, the district court granted the defendant’s
28 motion for judgment on the pleadings.

This Court agrees with Cisco that the claims in *Twilio* and *24/7 Customer* are analogous to the claim at issue here. The claims in those cases, as is the claim here, were directed to abstract ideas related to the ranking of information (whether message routing data, customer service representative profiles, or antenna performance) and taking subsequent action (whether routing of a delivery receipt, the selection of a customer service representative, or the selection of a master station) based on those rankings. As in *Twilio*, the patent here finds analogy in the brick and mortar world. Using the analogies that Judge Koh employed, the '522 patent purports to rank stations based on antenna performance, just as a prospective diner could rank restaurant choices based on the numbers of stars awarded by online reviewers.

Additionally, the example of ranking antenna performance that the specification uses could be performed by a mental process. The specification gives the following “example of a system in accordance with the present invention”:

a Bluetooth piconet comprising three devices: a laptop PC using antennas located in a slot-in PC card; a wireless headset; and a home telephony base station. The base station has the highest ranking antenna system, because of its size, possibly diversity, and a position that is not badly shadowed. The PC card has a miniature antenna and is shadowed by the PC, and therefore has a lower ranking antenna. The headset includes a very small and inefficient antenna with losses to the user’s head, significant shadowing and poorly defined polarisation, and therefore has the lowest ranking antenna.

Initially the network begins with communication between the PC and the headset. Because of its higher antenna ranking the PC becomes master in this piconet. When the base station joins the network, for example to enable Internet access by the PC, the base station will become master because it has the highest ranking antenna.

'522 patent at 3:38-50. Nothing in the patent’s process for ranking the antennas of the various devices or for making one of them the master describes anything that cannot be done manually or with a mental process. Even to a lay user, the superiority of the PC’s antenna to that of the headset would be obvious. The fact that ranking the antennas and preferencing the one with the highest performance could be done by a human performing a mental process thus further supports a finding that the '522 patent is directed to an abstract idea. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) (finding claims abstract because “with the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.”); *see also Twilio*, 249 F.

Supp. 3d at 1154 (“the United States Supreme Court and the Federal Circuit have also held that claims directed entirely to a ‘mental process’ are unpatentable . . . because the ‘application of [only] human intelligence to the solution of practical problems is no more than a claim to a fundamental principle.’”) (citations omitted). Even if what Uniloc has done here is automate a process that could otherwise be performed by a human, “[t]he mere automation of [a] process does not negate its abstraction.” *See Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1013 (Fed. Cir. 2018).

The Court finds further support in the Federal Circuit cases on which *Twilio* and *24/7 Customer* rely. For instance, in *In re TLI Commc’ns, LLC Patent Litig.*, 823 F.3d 607 (Fed. Cir. 2016), the court found “that the patent-in-suit claims no more than the abstract idea of classifying and storing digital images in an organized manner” and affirmed the district court’s dismissal of the complaint. 823 F.3d 609. The appellate court explained that while the representative claim⁴ “requires concrete, tangible components such as ‘a telephone unit’ and a ‘server,’ the specification makes clear that the recited physical components merely provide a generic environment in which to carry out the abstract idea of classifying and storing digital images in an organized manner.” *Id.* at 611. Nor were the claims “directed to a specific improvement to computer functionality. Rather,

⁴ The representative claim in *TLI Communications* recited:

17. A method for recording and administering digital images, comprising the steps of:

recording images using a digital pick up unit in a telephone unit,

storing the images recorded by the digital pick up unit in a digital form as digital images,

transmitting data including at least the digital images and classification information to a server, wherein said classification information is prescribable by a user of the telephone unit for allocation to the digital images,

receiving the data by the server,

extracting classification information which characterizes the digital images from the received data, and

storing the digital images in the server, said step of storing taking into consideration the classification information.

823 F.3d at 610.

they are directed to the use of conventional or generic technology in a nascent but well-known environment, without any claim that the invention reflects an inventive solution to any problem presented by combining the two.” *Id.* at 612. Moreover, “[t]he specification fails to provide any technical details for the tangible components, but instead predominately describes the system and methods in purely functional terms.” *Id.* As such, the claim was abstract under step one of *Alice*. *Id.* at 613; *see also Twilio*, 249 F. Supp. 3d at 1137 (“[T]he U.S. Supreme Court has recognized that information itself is intangible. . . . Accordingly, the Federal Circuit has generally found claims abstract where they are directed to some combination of collecting information, analyzing information, and/or displaying the results of that analysis.”) (citing, *inter alia*, *TLI Commc ’ns*, 823 F.3d at 611).

Where in *TLI Communications* the claim was directed to the abstract idea of classifying and storing digital images in an organized manner, here the claim relates to classifying (or ranking) stations in an organized manner (i.e., based on antenna performance). As in *TLI Communications*, the patent-in-suit utilizes “physical components [that] merely provide a generic environment in which to carry out the abstract idea.” *See TLI Commc ’ns*, 823 F.3d at 611. The specification utilizes as its primary example of an ad-hoc radio communication system “a Bluetooth network, operating according to the specification defined by the Bluetooth Special Interest Group.” ’522 Patent at 1:11-14. The devices on which the specification relies are used for illustrative purposes only:

A basic ad-hoc network configuration is illustrated in FIG. 1. Such a configuration would typically begin with two connected host devices, *for example* a portable PC and a cellular phone, and grow to include additional connected devices. A wide range of additional host devices *may* be included, *for example* wireless headsets, personal organisers and home entertainment equipment.

Id. at 2:16-22 (emphases added). None of these components represents an inventive solution, nor is any one of them even necessary to the patent—they are already existing devices used simply to show how the abstract idea may be carried out. *See Uniloc*, 2019 WL 1549968, at *14 (dismissing Uniloc’s patent related to Bluetooth communication system in part because the “’049 Patent specification admits that all tangible computing devices found in the Patent are all generic computing devices, upon which the ’049 Patent does not purport to improve[.]” and quoting language describing basic Bluetooth network configurations and citing “generic potential slave

stations such as a ‘keyboard, mouse, games controller, graphics pad or the like’ without further explication”).

Uniloc states that Cisco ignores binding precedent from the Federal Circuit, some of which post-dates the district court decisions in *Twilio* and *24/7 Customer*, and that those cases show that claim 6 of the ’522 patent is patent-eligible. In particular, Uniloc focuses on four cases: *SRI Int’l, Inc. v. Cisco Sys., Inc.*, 918 F.3d 1368 (Fed. Cir. 2019); *Data Engine*, 906 F.3d 999; *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299 (Fed. Cir. 2018); and *Thales Visionix, Inc. v. United States*, 850 F.3d 1343 (Fed. Cir. 2017).

Uniloc first argues that *Finjan* supports the patent eligibility of claim 6. Defs.’ Opp’n at 6-7. There, the Federal Circuit affirmed the district court’s finding that a patent was not directed to an abstract idea where it was “directed to a method of providing computer security by scanning a downloadable and attaching the results of that scan to the downloadable itself in the form of a ‘security profile.’” *Finjan*, 879 F.3d at 1303. The representative claim of the patent-in-suit recited:

1. A method comprising:
 - receiving by an inspector a Downloadable;
 - generating by the inspector a first Downloadable security profile that identifies suspicious code in the received Downloadable; and
 - linking by the inspector the first Downloadable security profile to the Downloadable before a web server makes the Downloadable available to web clients.

Id. At claim construction, the parties agreed to construe “Downloadable” to mean “an executable application program, which is downloaded from a source computer and run on the destination computer.” *Id.* The district court construed “Downloadable security profile that identifies suspicious code in the received Downloadable” to mean “a profile that identifies code in the received Downloadable that performs hostile *or potentially hostile* operations.” *Id.* at 1304 (emphasis added). The appellate court explained that a security profile that contains information about potentially hostile operations, as opposed to scans that recognized only previously-identified viruses, “constitute[d] an improvement in computer functionality.” *Id.* In this way, “the method of claim 1 employs *a new kind of file* that enables a computer security system to do things it could not do before.” *Id.* at 1305 (emphasis added).

At the hearing in this case, Uniloc likened claim 6 of the '522 patent to the claim found eligible in *Finjan* by arguing that claim 6 represents a technological solution to a technological problem. When asked to identify the technological solution, Uniloc stated that it is “the using of antenna performance characteristics in view of the local environment” as the method for determining a station’s rank. But unlike in *Finjan*, where the Federal Circuit found that the method of the claim “employ[ed] a new kind of file,” Uniloc has been unable to identify any technological solution beyond the *idea* of using antenna performance characteristics as a way of ranking stations. *Finjan*, 879 F.3d at 1306. At the hearing, Uniloc’s counsel briefly referenced software that is programmed to select the best antenna, but nothing about this appears in Uniloc’s brief nor, more importantly, does it appear in the claim or specification. Nor does claim 6 “recite specific steps . . . *that accomplish* the desired result.” *See Finjan*, 879 F.3d at 1306 (emphasis added). Rather, at the hearing, when the Court inquired whether the claim covered *any way* of using antenna performance characteristics to determine the master in a network, Uniloc answered in the affirmative—that yes, as long as it was based on using antenna performance characteristics, it was covered by the patent. In other words, the patent-in-suit claims the use of antenna performance characteristics to rank stations, but not any particular way of doing this.

The Court disagrees with Uniloc that “Claim 6 explains exactly how to achieve the desired result of a more operationally efficient ad-hoc network[.]” *See* Defs.’ Opp’n at 7. Claim 6 recites the functions of “determining a master/slave rank of each station in the network . . . using antenna performance characteristics” and “enabling a station with the highest rank to be master” but fails to provide any technical details on how this is achieved. *See* '522 Patent at 6:8-13. Claim 6 is more like the line of cases that the *Finjan* court distinguished and that stand for a “foundational patent law principle: that a result, even an innovative result, is not itself patentable.” *See id.* at 1305 (citing, inter alia, *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229 (Fed. Cir. 2016); *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253 (Fed. Cir. 2016)).

The remainder of the cases Uniloc cites are of little assistance to the Court’s § 101 analysis, as the claims in those cases are directed to entirely different subject matters than the one at issue here. In *SRI International*, the Federal Circuit affirmed the district court’s denial of summary

judgment to a competitor (Cisco) challenging under § 101 the eligibility of patents related to monitoring and surveillance of computer networks for intrusion detection. 918 F.3d at 1372. In finding the claims were not directed to an abstract idea, the appellate court explained that the “claims are directed to using a specific technique . . . to solve a technological problem arising in computer networks” *Id.* at 1375. Agreeing with the patent holder “that the human mind is not equipped to detect suspicious activity by using network monitors and analyzing network packets as recited by the claims[,]” the court found the claims patent-eligible under step one of *Alice*. *Id.* at 1376. Uniloc here argues that “the present case is indistinguishable from the *SRI/Cisco* case with regard to patent eligibility—if computer network functioning is improved and detailed in the specification and the claims, it is eligible.” Defs.’ Opp’n at 10. But as the Court has already explained, the claim and specification here are not directed to a specific technique to solve a technological problem; rather, claim 6 is among the category of claims that are “drawn to using computers as tools to solve a . . . problem, rather than improving the functionality of computers and computer networks themselves.” *See SRI Int’l*, 918 F.3d at 1375 (distinguishing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016)). Nor is the Federal Court’s decision in *Thales* analogous, where the claims there were “directed to systems and methods that use inertial sensors in a non-conventional manner to reduce errors in measuring the relative position and orientation of a moving object on a moving reference frame.” *See* 850 F.3d at 1348-49. The Court finds the patent in *Thales*, which “specif[ied] a particular configuration of inertial sensors and a particular method of using the raw data from the sensors,” distinguishable from the patent-in-suit here. *See id.* at 1349

Uniloc also relies on the *Data Engine* decision, but as Cisco notes, Uniloc omits the portion of the decision finding some of the patents-in-suit ineligible under § 101 because they failed the two-step *Alice* test. *See* Defs.’ Opp’n at 11-12; Pl.’s Reply at 8-10. In *Data Engine*, the Federal Circuit found that claims “directed to a specific improved method for navigating through complex three-dimensional electronic spreadsheets,” specifically by the creation of “notebook tabs” located along the bottom edge of the page, were not abstract under *Alice* step one. 906 F.3d at 1002. However, the appeals court went on to find that the claims of another patent-in-suit that “recit[ed] methods for tracking changes to data in spreadsheets” were “directed to the abstract idea of

collecting, recognizing, and storing changed information” and were patent-ineligible under § 101. *Id.* As with the technology in *Thales*, the Court sees no similarity between the creation of “notebook tabs” to manage electronic spreadsheets and the ad-hoc radio communication systems that the patent-in-suit purports to improve.

Instead, the Court agrees with Cisco that claim 6 bears more similarity to one of the claims that the *Data Engine* court found directed to an abstract idea. That claim at heart embodied the concept of “manually tracking modifications across multiple spreadsheets[,]” and “[t]he mere automation of this process [did] not negate its abstraction.” *Id.* at 1013. The *Data Engine* court likened these claims to those held ineligible in another case, where the claims were “directed to methods of extracting data from hard-copy documents using an automated scanner, recognizing information from the extracted data, and storing that data in memory.” *Id.* (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1345, 1347 (Fed. Cir. 2014)). Where *Content Extraction* involved claims related to extracting, recognizing, and storing information, here claim 6 involves identifying information (that is, antenna performance characteristics) and making a selection (i.e., ranking) based on that information. This claim is far more like the one the *Data Engine* court found ineligible than it is like the “notebook tab” patent that the court found eligible. Notably, of all the cases that Uniloc cites as demonstrating the patent eligibility of claim 6, none involve sorting information, ranking information, or selecting an option based on ranked information such as antenna performance.

For all of the above reasons, the Court finds that claim 6 is directed to an abstract idea and therefore proceeds to step two of the *Mayo/Alice* test.

III. Inventive Concept

At step two of the *Alice* framework, the court considers the elements of each claim and asks, “what else is there in the claims before us?” *Alice*, 573 U.S. at 217. The Supreme Court describes this process as searching for an “‘inventive concept’—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.* at 217-18. For an abstract idea involving a computer to

1 be patent-eligible, “the claim ha[s] to supply a ‘new and useful’ application of the idea.” *Id.* at 222
2 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)); *see also* *Diamond v. Diehr*, 450 U.S. 175,
3 177 (1981) (validating a claim employing a mathematical equation used in a larger process designed
4 to solve a technological problem in the molding of rubber products). An inventive concept occurs
5 when the claims are “more than a drafting effort designed to monopolize the [abstract idea]” and
6 “claims may be read to ‘improve[] an existing technological process.’” *Bascom Glob. Internet*
7 *Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1351 (Fed. Cir. 2016) (quoting *Alice*, 573 U.S.
8 at 221-23). The court’s task at step two “is to ‘determine whether the claims do significantly more
9 than simply describe [the] abstract method’ and thus transform the abstract idea into patentable
10 subject matter.” *Affinity Labs*, 838 F.3d at 1262 (citation omitted).

11 Uniloc argues that the specification “reveals the inventive concept: forming an ad-hoc
12 network that enables the station in the piconet with the highest rank based on antenna performance
13 characteristics to act as master.” Defs.’ Opp’n at 17. But this is nothing more than a restatement of
14 the idea of ranking and selecting devices based on antenna performance characteristics that the Court
15 found to be abstract at step one. Uniloc says the appropriate inquiry “is whether the claimed
16 technique for forming an ad-hoc network is conventional.” *Id.* The problem here is that nothing in
17 the claim or the specification explains the *technique* in anything more than broad, generalized,
18 functional terms. In this way, claim 6 “do[es] not recite anything more than simply stating the
19 abstract idea while adding the words ‘apply it.’” *See Data Engine*, 906 F.3d at 1013 (citing *Alice*,
20 573 U.S. at 221) (internal quotation marks and alterations omitted).

21 Uniloc disputes Cisco’s attack that claim 6 fails because it doesn’t explain how the antenna
22 performance is measured or how those measurements are used to determine the highest ranking
23 station. *See* Pl.’s Mot. at 11-12; Defs.’ Opp’n at 18. Uniloc states that claim 6 “details exactly
24 ‘how’ to form an ad-hoc network more efficiently—enable the station in the piconet with the highest
25 rank based on antenna performance characteristics to act as master.” Defs.’ Opp’n at 18. But claim
26 6 does not detail “how” to do this, beyond reciting the general steps of “determining” (or ranking)
27 stations based on antenna performance characteristics and “enabling” (or selecting) the station with
28 the highest rank to be master. None of these claim elements, viewed individually or as an ordered

combination, provide an inventive concept. *See Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (“The claim uses a conventional ordering of steps—first processing the data, then routing it, controlling it, and monitoring its reception—with conventional technology to achieve its desired result.”).

Moreover, neither the claim nor the specification provides for implementation of the abstract idea using anything other than existing, conventional technology. The specification describes the invention in this way:

The selection of master station requires the stations to compare their rankings. One way in which this can be accomplished is for the master station to request each of the other stations to provide their rankings, *using standard Bluetooth communication protocols*. If the master station determines that its ranking is lower than one of its slave stations then it hands over the master role to that station, *using the normal methods defined in the Bluetooth specification*.

’522 Patent at 3:24-32 (emphases added). The specification also relies on conventional and generic hardware to carry out the method: for instance, a laptop PC, a wireless headset, and a home telephony base station; or a mobile phone and a UMTS (Universal Mobile Telecommunication System) enabled laptop computer. *See, e.g., id.* at 3:38-42, 4:23-26.

But, “after *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.” *DDR Holdings LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (“Thus, while the patent may in fact require that the claimed data relate to ‘transactions or activities that are executed in the computer environment,’ limiting the claims to the computer field does not alone transform them into a patent-eligible application.”); *Clarilogic, Inc. v. FormFree Holdings Corp.*, 681 Fed. App’x 950, 955 (Fed. Cir. 2017) (invalidating computer-implemented method for providing certified financial data indicating financial risk about an individual because “a method for collection, analysis, and generation of information reports, where the claims are not limited to how the collected information is analyzed or reformed, is the height of abstraction[,]” “the claims require only off-the-shelf, conventional computer technology for gathering, analyzing, and displaying the desired information[,]” and “[e]ven if the ’243 patent may be said to invoke internet-based systems to increase speed . . . [t]he ’243 patent does not claim the

technical manner in which financial data is gathered, analyzed, or output”).

What is needed to pass muster at step two of *Alice* is something “significantly more” than a description of the abstract idea itself, as the Federal Circuit explained in *Affinity Labs*. 838 F.3d at 1262. That case involved a patent with two independent claims “directed to streaming regional broadcast signals to cellular telephones located outside the region served by the regional broadcaster.” *Id.* at 1255. After finding the claims were directed to an abstract idea at step one, the court went on to find no inventive concept at step two. The court explained, “The claim simply recites the use of generic features of cellular telephones, such as a storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea.” *Id.* at 1262. So too here, where claim 6 and the specification as a whole simply use existing Bluetooth technology and existing hardware as the generic environment for implementing the abstract idea of ranking and selecting stations based on antenna performance characteristics. *See Uniloc*, 2019 WL 1549968, at *16 (finding no inventive concept where the specification did not invent the limitations found in the claim and where the stations disclosed in the claim “are generic, conventional computing devices”).

As in *Affinity Labs*, the claim here is “so result-focused, so functional, as to effectively cover any solution to an identified problem[.]” *See* 838 F.3d at 1265 (citing *Elec. Power Grp.*, 830 F.3d at 1365). The Federal Circuit frequently holds such claims ineligible under section 101. *See id.*; *see also SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1169-70 (Fed. Cir. 2018) (affirming district court’s judgment on the pleadings where the claims themselves were abstract and where “there [were] no factual allegations from which one could plausibly infer that they are inventive[.]” finding, “it is clear, from the claims themselves and the specification, that these limitations require no improved computer resources InvestPic claims to have invented, just already available computers, with their already available basic functions, to use as tools in executing the claimed process”). The Court finds no inventive concept that transforms Uniloc’s abstract idea into patentable subject matter.

Accordingly, the Court concludes that claim 6 of the ’522 patent is invalid under § 101.

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CONCLUSION

For the foregoing reasons and for good cause shown, the Court hereby GRANTS Cisco's motion for judgment on the pleadings. The parties are directed to file a joint statement identifying the issues which remain to be decided in this case and proposing a schedule for same. **Such joint statement must be filed no later than May 15, 2019.**

IT IS SO ORDERED.

Dated: May 6, 2019



SUSAN ILLSTON
United States District Judge